

**INFORMATION SECURITY MANAGEMENT METRICS IN WEB  
APPLICATION**

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This project report is dedicated to my parents; Hj Abd Rahim Bin Talib and Hjh Rosemani Bt Hj Abd Ghani, for their love and prayers, to my brothers and sister; Azmi, Azhar, Izwan and Fazilah, for moral support and to my nephews and nieces; Aizat, Izza, Danial, Sarah, Farizal and Farzana for always being cute.

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## **ABSTRACT**

Nowadays web application becomes an important part of every one's life to pay bills online, to buy things online and so many more. Despite the rapid growth of web application based software, the vulnerabilities of web application and the attacks also increase rapidly too. Many web developers ignore the importance of developing web application with security in their mind. As a result, many hackers even script kiddies could gain or steal web application user's sensitive data such as credit card number, user ID and password and so on for their own evil deeds. To evaluate the information security management metrics in web application, the researcher used questionnaire method. The respondents are web application programmer from different level such as experienced, intermediate and novice level. To help developer build web application with security in mind is to create a matrix mapping of information security management metrics in web application to raise awareness of web application vulnerabilities during the web application development. This way, it could help developer to not only raise their awareness regarding security of building a web application, moreover it could help diminished cost of fixing bugs that are found during software development life cycle phase (SDLC).

## **ABSTRAK**

Pada masa kini aplikasi web menjadi semakin penting dalam kehidupan kita seharian untuk membayar bil secara atas talian, membeli barang-barang secara atas talian dan banyak lagi secara atas talian. Dengan pembangunan aplikasi web berasaskan perisian yang semakin pesat membangun ini, ancaman terhadap aplikasi web juga semakin meningkat. Kebanyakan pembangun aplikasi web tidak mengendahkan betapa pentingnya soal keselamatan dalam membangunkan aplikasi web. Akibatnya, para penggadam-penggadam web mengambil kesempatan ini dengan mencuri data-data sensitif pengguna-pengguna aplikasi web seperti nombor kad kredit, nama pengguna dan kata laluan untuk menjalankan niat jahat mereka. Untuk menilai matrik pengurusan keselamatan maklumat dalam aplikasi web, penyelidik menggunakan kaedah soal kaji selidik. Responden adalah terdiri daripada pengaturcara yang berpengalaman, pertengahan dan juga permulaan. Untuk membantu pembangun membina aplikasi web dengan keselamatan di minda mereka adalah dengan mencipta pemetaan matriks berdasarkan pengurusan keselamatan maklumat dalam aplikasi web untuk membangkitkan kesedaran terhadap kelemahan-kelemahan semasa pembangunan aplikasi web. Dengan cara ini, ianya dapat membantu para pembangun web dengan bukan sahaja membangkitkan kesedaran tentang keselamatan semasa membangunkan perisian, malah dapat mengurangkan kos membaiki ralat-ralat yang dijumpai semasa fasa kitar hayat pembangunan perisian (SDLC).